

## What will I be studying?

The undergraduate mathematics program offers a diversity of courses designed not only to enable the student to pursue a profession in mathematics itself, but also to enhance the student's competence in the fields of engineering, the physical sciences, the life sciences, and the social sciences. The program emphasizes the broad nature of modern mathematics and its close associations with the real world and prepares students for careers in industry or secondary education, as well as entry into graduate school.

## Career Ideas!

**Mathematicians can work in any industry or any government agency in a variety of roles\*\*:**

- ❖ Cryptography
- ❖ Economist
- ❖ Education
- ❖ Computer Programmer Systems
- ❖ Systems Analyst
- ❖ Actuary
- ❖ Data miner/Data Analyst/Scientist
- ❖ Market Research Analyst
- ❖ Financial Analyst
- ❖ Post-secondary Academia & Research
- ❖ Statistician
- ❖ Insurance Underwriter

\*\*Please note this is not a complete list of careers



**Science Center (SCA) 239**



[mathadvise@usf.edu](mailto:mathadvise@usf.edu)



## Contact Us

**USF Math Club**

**Nagle Lectures**

**American Mathematical Society**

**Mathematical Association of America**

**Society of Actuaries**

**Career Services**



## Get Involved!

Mathematics and Statistics Department  
Mathematics: Computational & Applied – Mathematics Concentration, B.S.

## Example Four Year Plan

Year 1		
Fall	Spring	Summer
Supporting Science and Lab (CHM, BSC, EVR, PHY)	STA 2023: Introductory Statistics I	Enhanced Gen-Ed: Human & Cultural Diversity
MAC 2311: Calculus I**	MAC 2312: Calculus II	Non-Major Elective
ENC 1101: Composition 1	ENC 1102: Composition 2	
Core Humanities	Enhanced Gen-Ed: Creative Thinking	
Total Hours: 14	Total Hours: 13	Total Hours: 6
Year 2		
Fall	Spring	Summer
MAD 2470: Introduction to Cryptography: Enhanced Gen-Ed: Info & Data Literacy	MAD 3107 or MGF 3301 Bridge to Abstract Mathematic	Upper-Level Non-Major Elective
MAC 2313: Calculus III	MAP 2302: Differential Equations	Upper-Level Non-Major Elective
ST 3024: Introductory Statistics II	MAS 3114: Computational Linear Algebra	
Core Social Sciences	Non-Major Elective	
Non-Major Elective		
Total Hours: 16	Total Hours: 12	Total Hours: 6
Year 3		
Fall	Spring	Summer
COP 2030: Programming Concepts I	Major: Concentration Elective	
MAD 4401: Numerical Analysis I	Enhanced Gen-Ed: High Impact Practice	
STA 4442: Introduction to Probability	Non-Major Elective	
Non-Major Elective	Upper-Level Non-Major Elective	
	Upper-Level Non-Major Elective	
Total Hours: 12	Total Hours: 15	Total Hours: 0
Year 4		
Fall	Spring	Total Credits to Graduation
Major: Concentration Elective	MAP 4103: Mathematical Modeling	<b>Major Requirements:</b> 61 credit hours
Major: Concentration Elective	Major: Concentration Elective	
Enhanced Gen-Ed: Ethical Reasoning & Civic Engagement	Non-Major Elective	<b>General Education Requirements:</b> 24 credit hours
Non-Major Elective	Non-Major Elective	
Non-Major Elective		<b>Other Degree Requirements:</b> 35 credit hours
Total Hours: 14	Total Hours: 12	Total= 120 -121

\*\*May require completion of additional math pre-requisites (consider the [MPT](#) or [CPT](#) exams)